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SHORT CASES IN CARDIOLOGY

Interventricular septal hydatid cyst presenting as complete heart block

Dinesh K Agarwal, Reshma Agarwal, Satish P Barthwal

Department of Cardiology and PG Department of Medicine, MLN Medical College, Allahabad, India
D K Agarwal
R Agarwal
S P Barthwal

Correspondence to:
Dr D K Agarwal, 7/5A/4 CY Chintamani Road, Darbhanga Colony, Allahabad 211 001, Uttar Pradesh, India.

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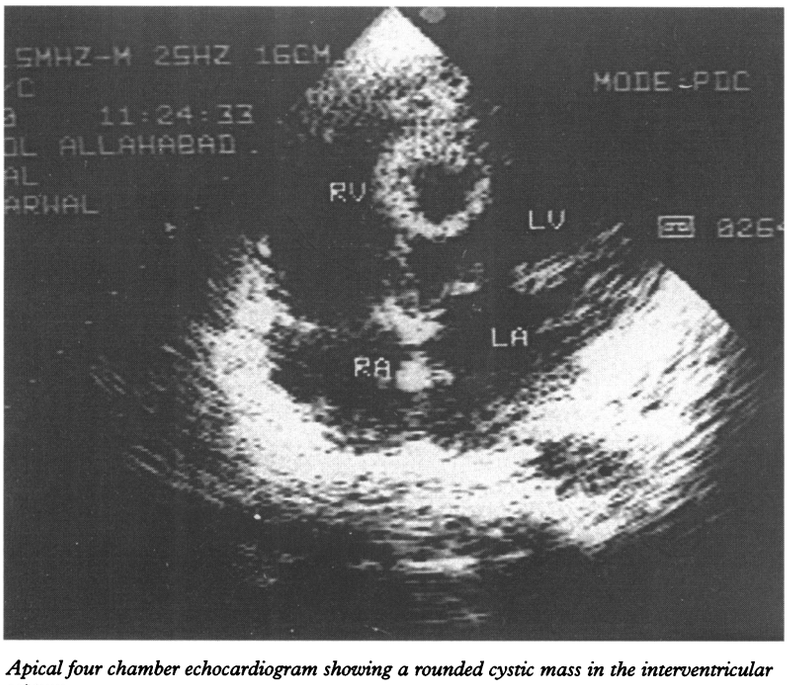
A 25 year old man presented with Stokes-Adams attacks, which he had had for 18 months. His pulse rate was 40 per minute and his blood pressure was 140/60 mm Hg. Cardiac examination showed a grade 2/6 mid-ejection systolic murmur at the left sternal border with no signs of cardiac failure. Pulmonary and neurological examinations were normal. The electrocardiogram showed complete heart block. The chest *x* ray and haemogram were normal. He was treated with temporary ventricular pacing. Colour Doppler echocardiography (Vingmed CFM 725) showed a homogeneous cystic mass (diameter 2·8 cm) with smooth rims located in the middle third of the interventricular septum (figure). There was no gradient across left ventricular or right ventricular outflow tracts. Abdominal ultrasound showed a cyst (diameter 5·3 cm) with internal echogenic shadows in the posterior segment of right hepatic lobe. A computed tomogram of the abdomen showed similar findings.

The indirect haemagglutination test for echinococcus was positive (1/640). The hepatic cyst was drained and injected with hypertonic saline. The cyst contained scolices of echinococcus. He had been treated with albendazole for 2 weeks before the hepatic cyst was drained. This dose (5 mg/kg twice daily) was continued for another 2 weeks. Two more courses were repeated after an interval of 3 weeks.

The patient refused cardiac surgery. A permanent pacemaker (VVI multiprogrammable) was implanted because he was dependent on the temporary pacemaker. When the patient was reassessed after 6 months and after 2 years he was symptom free. The patient was reassessed at one year when he was still pacemaker dependent and there was no change in the size of the cyst on the echocardiogram.

Echinococcosis in the heart is uncommon and a cyst in the interventricular septum is rarer still, accounting for only 2–9% of all cardiac cases.[1-2] They occur in the pericardium or free wall of left ventricle in 50%–77% cases.[1-3] In our patient the hydatid cyst was located in the interventricular septum and caused syncopal attacks owing to complete heart block. Another similar case has been reported.[2] We agree with the earlier reports[3,4] that cross sectional echocardiography is the most reliable method of diagnosing an intraseptal hydatid cyst. In our patient the scolices found in the fluid from the hepatic cyst was further evidence that the cyst in the interventricular septum was hydatid. This tended to exclude the other possibility of a mesothelioma.

Surgical removal of the cardiac cyst remains the best treatment.[2] Where this is not feasible, however, patients can be treated satisfactorily with repeated courses of albendazole and the supportive measures used in our patient.



Apical four chamber echocardiogram showing a rounded cystic mass in the interventricular septum.

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